

REMARKS/ARGUMENTS

Claims 1 – 5 remain in this application. Claims 6, 9 and 10 have been canceled, and claims 7, 8 and 11 have been withdrawn.

Independent claim 1 has been amended to patentably distinguish over claims 17 – 20 of applicant's own prior U.S. Patent No. 6,609,719, thereby obviating the rejection of the claims on the grounds of obviousness-type double patenting.

Claims 1 - 6, 9 and 10 were further rejected under the second paragraph of 35 U.S.C. 112 as being indefinite. The claim amendments, particularly the amendments to claims 1 and 2, serve to more clearly point out the invention and thus avoid the rejection. Reconsideration and withdrawal of that rejection in view of the amendments is deemed proper.

Claims 1 – 6, 9 and 10 were also rejected under the provisions of 35 U.S.C. 103(a) as being obvious, and hence unpatentable, over MacBeth in view of Goguey. The Examiner reasoned that it would have been obvious to one of ordinary skill in the art to mount the wheels of the MacBeth on stub axles as is taught by Goguey "in order to reduce the overall weight of the wheel assembly."

There is, of course, no direct or implied teaching in either of the references to modify the wheel structure of MacBeth in the manner proposed by the Examiner. As was discussed in the case of *In re Sernaker*, 702 F.2d 989, 217 USPQ 1, 5-6 (Fed. Cir. 1983), the strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles, that some advantage or unexpected beneficial result would have been produced by their combination. A mere statement that modifications of the prior art to meet the claimed invention because the references relied upon show that all features of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case for obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993)

Clearly there is no directed or implied teaching in the references of a beneficial or unexpected result coming out of the proposed combination, but the Examiner proposes that a reduction in the "overall weight of the wheel assembly" constitutes

such a result. That conclusion does not stand up to careful scrutiny. As is shown in MacBeth's Figures 3 and 4, patentees' wheel consists of a set of radial spoke members B that are connected by members C which form a kind of rim for each set of spoke members. The extremities of adjacent spokes of each set are connected by axles extending between them. Now, if one were to replace that end-supported axle with a stub axle (in the manner proposed by the Examiner) then a weight applied to a wheel mounted on the stub axle would impart a sideways, bending force to the fragile spoke. That sideways force would almost certainly present a danger of wheel collapse as a load is applied. To overcome the engineering fault inherent in the Examiner's proposed modification, it would be necessary to strengthen spokes B in some fashion or another. Such strengthening would, in turn, almost certainly add weight to the wheel assembly. Hence, the rationale for the Examiner's proposed modification disappears as does the basis for the rejection on obviousness grounds.

In view of the Examiner's earlier restriction requirement, applicant retains the right to present claims 7, 8 and 11 in a divisional application.

All rejections of record are deemed to have been obviated or otherwise overcome by the amendments to the claims and the arguments presented herein. Applicant therefore respectfully requests that the Examiner reconsider the rejections and issue a Notice of Allowance.

Respectfully submitted,



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